SEQUENCE LISTING

<110> Nakagawa, Yasuko
        Ono, Yuichi
        Sakamoto, Yoshimasa
        Mizuhara, Eri
        Nakatani, Tomoya
        Takai, Yoshimi

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<213> Mus musculus

<400> 3

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                20                  25                  30
Leu Leu Gly Glu Glu Ala Arg Leu Pro Cys Ala Leu Gly Ala Tyr Arg
            35                  40                  45
Gly Leu Val Gln Trp Thr Lys Asp Gly Leu Ala Leu Gly Gly Glu Arg
        50                  55                  60
Asp Leu Pro Gly Trp Ser Arg Tyr Trp Ile Ser Gly Asn Ser Ala Ser
65                  70                  75                  80
Gly Gln His Asp Leu His Ile Lys Pro Val Glu Leu Glu Asp Glu Ala
                85                  90                  95
Ser Tyr Glu Cys Gln Ala Ser Gln Ala Gly Leu Arg Ser Arg Pro Ala
            100                 105                 110
Gln Leu His Val Met Val Pro Pro Glu Ala Pro Gln Val Leu Gly Gly
        115                 120                 125
Pro Ser Val Ser Leu Val Ala Gly Val Pro Gly Asn Leu Thr Cys Arg
    130                 135                 140
Ser Arg Gly Asp Ser Arg Pro Ala Pro Glu Leu Leu Trp Phe Arg Asp
145                 150                 155                 160
Gly Ile Arg Leu Asp Ala Ser Ser Phe His Gln Thr Thr Leu Lys Asp
                165                 170                 175
Lys Ala Thr Gly Thr Val Glu Asn Thr Leu Phe Leu Thr Pro Ser Ser
            180                 185                 190
His Asp Asp Gly Ala Thr Leu Ile Cys Arg Ala Arg Ser Gln Ala Leu
            195                 200                 205
Pro Thr Gly Arg Asp Thr Ala Val Thr Leu Ser Leu Gln Tyr Pro Pro
    210                 215                 220
Met Val Thr Leu Ser Ala Glu Pro Gln Thr Val Gln Glu Gly Glu Lys
225                 230                 235                 240
Val Thr Phe Leu Cys Gln Ala Thr Ala Gln Pro Pro Val Thr Gly Tyr
                245                 250                 255
Arg Trp Ala Lys Gly Gly Ser Pro Val Leu Gly Ala Arg Gly Pro Arg
            260                 265                 270
Leu Glu Val Val Ala Asp Ala Thr Phe Leu Thr Glu Pro Val Ser Cys
            275                 280                 285
Glu Val Ser Asn Ala Val Gly Ser Ala Asn Arg Ser Thr Ala Leu Glu
        290                 295                 300
Val Leu Tyr Gly Pro Ile Leu Gln Ala Lys Pro Lys Ser Val Ser Val
305                 310                 315                 320
Asp Val Gly Lys Asp Ala Ser Phe Ser Cys Val Trp Arg Gly Asn Pro
                325                 330                 335
Leu Pro Arg Ile Thr Trp Thr Arg Met Gly Gly Ser Gln Val Leu Ser
            340                 345                 350
Ser Gly Pro Thr Leu Arg Leu Pro Ser Val Ala Leu Glu Asp Ala Gly
            355                 360                 365
Asp Tyr Val Cys Arg Ala Glu Pro Arg Arg Thr Gly Leu Gly Gly Gly
        370                 375                 380
Lys Ala Gln Ala Arg Leu Thr Val Asn Ala Pro Pro Val Val Thr Ala
385                 390                 395                 400
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3

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Leu Gln Pro Ala Pro Ala Phe Leu Arg Gly Pro Ala Arg Leu Gln Cys
            405             410             415
Val Val Phe Ala Ser Pro Ala Pro Asp Ser Val Val Trp Ser Trp Asp
            420             425             430
Glu Gly Phe Leu Glu Ala Gly Ser Leu Gly Arg Phe Leu Val Glu Ala
            435             440             445
Phe Pro Ala Pro Glu Val Glu Gly Gly Gln Gly Pro Gly Leu Ile Ser
        450             455             460
Val Leu His Ile Ser Gly Thr Gln Glu Ser Asp Phe Thr Thr Gly Phe
465             470             475             480
Asn Cys Ser Ala Arg Asn Arg Leu Gly Glu Gly Arg Val Gln Ile His
            485             490             495
Leu Gly Arg Arg Asp Leu Leu Pro Thr Val Arg Ile Val Ala Gly Ala
            500             505             510
Ala Ser Ala Ala Thr Ser Leu Leu Met Val Ile Thr Gly Val Val Leu
            515             520             525
Cys Cys Trp Arg His Gly Ser Leu Ser Lys Gln Lys Asn Leu Val Arg
            530             535             540
Ile Pro Gly Ser Ser Glu Gly Ser Ser Ser Arg Gly Pro Glu Glu Glu
545             550             555             560
Thr Gly Ser Ser Glu Asp Arg Gly Pro Ile Val His Thr Asp His Ser
            565             570             575
Asp Leu Val Leu Glu Glu Lys Glu Ala Leu Glu Thr Lys Asp Pro Thr
            580             585             590
Asn Gly Tyr Tyr Lys Val Arg Gly Val Ser Val Ser Leu Ser Leu Gly
            595             600             605
Glu Ala Pro Gly Gly Gly Leu Phe Leu Pro Pro Pro Ser Pro Ile Gly
            610             615             620
Leu Pro Gly Thr Pro Thr Tyr Tyr Asp Phe Lys Pro His Leu Asp Leu
625             630             635             640
Val Pro Pro Cys Arg Leu Tyr Arg Ala Arg Ala Gly Tyr Leu Thr Thr
            645             650             655
Pro His Pro Arg Ala Phe Thr Ser Tyr Met Lys Pro Thr Ser Phe Gly
            660             665             670
Pro Pro Asp Leu Ser Ser Gly Thr Pro Pro Phe Pro Tyr Ala Thr Leu
            675             680             685
Ser Pro Pro Ser His Gln Arg Leu Gln Thr His Val
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<211> 650
<212> PRT
<213> Mus musculus
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            20              25              30
His Asp Leu His Ile Lys Pro Val Glu Leu Glu Asp Glu Ala Ser Tyr
            35              40              45
Glu Cys Gln Ala Ser Gln Ala Gly Leu Arg Ser Arg Pro Ala Gln Leu
        50              55              60
His Val Met Val Pro Pro Glu Ala Pro Gln Val Leu Gly Gly Pro Ser
65              70              75              80
Val Ser Leu Val Ala Gly Val Pro Gly Asn Leu Thr Cys Arg Ser Arg
            85              90              95
Gly Asp Ser Arg Pro Ala Pro Glu Leu Leu Trp Phe Arg Asp Gly Ile
            100             105             110
Arg Leu Asp Ala Ser Ser Phe His Gln Thr Thr Leu Lys Asp Lys Ala
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4

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              115                       120                       125
Thr Gly Thr Val Glu Asn Thr Leu Phe Leu Thr Pro Ser Ser His Asp
    130                       135                       140
Asp Gly Ala Thr Leu Ile Cys Arg Ala Arg Ser Gln Ala Leu Pro Thr
145                       150                       155                       160
Gly Arg Asp Thr Ala Val Thr Leu Ser Leu Gln Tyr Pro Pro Met Val
                  165                       170                       175
Thr Leu Ser Ala Glu Pro Gln Thr Val Gln Glu Gly Glu Lys Val Thr
                  180                       185                       190
Phe Leu Cys Gln Ala Thr Ala Gln Pro Pro Val Thr Gly Tyr Arg Trp
                  195                       200                       205
Ala Lys Gly Gly Ser Pro Val Leu Gly Ala Arg Gly Pro Arg Leu Glu
    210                       215                       220
Val Val Ala Asp Ala Thr Phe Leu Thr Glu Pro Val Ser Cys Glu Val
225                       230                       235                       240
Ser Asn Ala Val Gly Ser Ala Asn Arg Ser Thr Ala Leu Glu Val Leu
                  245                       250                       255
Tyr Gly Pro Ile Leu Gln Ala Lys Pro Lys Ser Val Ser Val Asp Val
                  260                       265                       270
Gly Lys Asp Ala Ser Phe Ser Cys Val Trp Arg Gly Asn Pro Leu Pro
    275                       280                       285
Arg Ile Thr Trp Thr Arg Met Gly Gly Ser Gln Val Leu Ser Ser Gly
    290                       295                       300
Pro Thr Leu Arg Leu Pro Ser Val Ala Leu Glu Asp Ala Gly Asp Tyr
305                       310                       315                       320
Val Cys Arg Ala Glu Pro Arg Arg Thr Gly Leu Gly Gly Gly Lys Ala
                  325                       330                       335
Gln Ala Arg Leu Thr Val Asn Ala Pro Pro Val Val Thr Ala Leu Gln
                  340                       345                       350
Pro Ala Pro Ala Phe Leu Arg Gly Pro Ala Arg Leu Gln Cys Val Val
                  355                       360                       365
Phe Ala Ser Pro Ala Pro Asp Ser Val Val Trp Ser Trp Asp Glu Gly
    370                       375                       380
Phe Leu Glu Ala Gly Ser Leu Gly Arg Phe Leu Val Glu Ala Phe Pro
385                       390                       395                       400
Ala Pro Glu Val Glu Gly Gly Gln Gly Pro Gly Leu Ile Ser Val Leu
                  405                       410                       415
His Ile Ser Gly Thr Gln Glu Ser Asp Phe Thr Thr Gly Phe Asn Cys
                  420                       425                       430
Ser Ala Arg Asn Arg Leu Gly Glu Gly Arg Val Gln Ile His Leu Gly
    435                       440                       445
Arg Arg Asp Leu Leu Pro Thr Val Arg Ile Val Ala Gly Ala Ala Ser
    450                       455                       460
Ala Ala Thr Ser Leu Leu Met Val Ile Thr Gly Val Val Leu Cys Cys
465                       470                       475                       480
Trp Arg His Gly Ser Leu Ser Lys Gln Lys Asn Leu Val Arg Ile Pro
                  485                       490                       495
Gly Ser Ser Glu Gly Ser Ser Ser Arg Gly Pro Glu Glu Glu Thr Gly
                  500                       505                       510
Ser Ser Glu Asp Arg Gly Pro Ile Val His Thr Asp His Ser Asp Leu
                  515                       520                       525
Val Leu Glu Glu Lys Glu Ala Leu Glu Thr Lys Asp Pro Thr Asn Gly
    530                       535                       540
Tyr Tyr Lys Val Arg Gly Val Ser Val Ser Leu Ser Leu Gly Glu Ala
545                       550                       555                       560
Pro Gly Gly Gly Leu Phe Leu Pro Pro Ser Pro Ile Gly Leu Pro
                  565                       570                       575
Gly Thr Pro Thr Tyr Tyr Asp Phe Lys Pro His Gln Asp Leu Val Pro
    580                       585                       590
Pro Cys Arg Leu Tyr Arg Ala Arg Ala Gly Tyr Leu Thr Thr Pro His
    595                       600                       605
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5

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Pro Arg Ala Phe Thr Ser Tyr Met Lys Pro Thr Ser Phe Gly Pro Pro
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Asp Leu Ser Ser Gly Thr Pro Pro Phe Pro Tyr Ala Thr Leu Ser Pro
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Pro Ser His Gln Arg Leu Gln Thr His Val
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<210> 5
<211> 2980
<212> DNA
<213> Homo sapiens

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<210> 6
<211> 708
<212> PRT
<213> Homo sapiens

<400> 6

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            20                  25                  30
Leu Val Val Leu Leu Gly Glu Glu Ala Arg Leu Pro Cys Ala Leu Gly
        35                  40                  45
Ala Tyr Trp Gly Leu Val Gln Trp Thr Lys Ser Gly Leu Ala Leu Gly
    50                  55                  60
Gly Gln Arg Asp Leu Pro Gly Trp Ser Arg Tyr Trp Ile Ser Gly Asn
65                  70                  75                  80
Ala Ala Asn Gly Gln His Asp Leu His Ile Arg Pro Val Glu Leu Glu
            85                  90                  95
Asp Glu Ala Ser Tyr Glu Cys Gln Ala Thr Gln Ala Gly Leu Arg Ser
            100                 105                 110
Arg Pro Ala Gln Leu His Val Leu Val Pro Pro Glu Ala Pro Gln Val
        115                 120                 125
Leu Gly Gly Pro Ser Val Ser Leu Val Ala Gly Val Pro Ala Asn Leu
    130                 135                 140
Thr Cys Arg Ser Arg Gly Asp Ala Arg Pro Thr Pro Glu Leu Leu Trp
145                 150                 155                 160
Phe Arg Asp Gly Val Leu Leu Asp Gly Ala Thr Phe His Gln Thr Leu
                165                 170                 175
Leu Lys Glu Gly Thr Pro Gly Ser Val Glu Ser Thr Leu Thr Leu Thr
            180                 185                 190
Pro Phe Ser His Asp Asp Gly Ala Thr Phe Val Cys Arg Ala Arg Ser
            195                 200                 205
Gln Ala Leu Pro Thr Gly Arg Asp Thr Ala Ile Thr Leu Ser Leu Gln
    210                 215                 220
Tyr Pro Pro Glu Val Thr Leu Ser Ala Ser Pro His Thr Val Gln Glu
225                 230                 235                 240
Gly Glu Lys Val Ile Phe Leu Cys Gln Ala Thr Ala Gln Pro Pro Val
                245                 250                 255
Thr Gly Tyr Arg Trp Ala Lys Gly Gly Ser Pro Val Leu Gly Ala Arg
                260                 265                 270
Gly Pro Arg Leu Glu Val Val Ala Asp Ala Ser Phe Leu Thr Glu Pro
            275                 280                 285
Val Ser Cys Glu Val Ser Asn Ala Val Gly Ser Ala Asn Arg Ser Thr
    290                 295                 300
Ala Leu Asp Val Leu Phe Gly Pro Ile Leu Gln Ala Lys Pro Glu Pro
305                 310                 315                 320
Val Ser Val Asp Val Gly Glu Asp Ala Ser Phe Ser Cys Ala Trp Arg
                325                 330                 335
Gly Asn Pro Leu Pro Arg Val Thr Trp Thr Arg Arg Gly Gly Ala Gln
            340                 345                 350
Val Leu Gly Ser Gly Ala Thr Leu Arg Leu Pro Ser Val Gly Pro Glu
        355                 360                 365
Asp Ala Gly Asp Tyr Val Cys Arg Ala Glu Ala Gly Leu Ser Gly Leu
    370                 375                 380
Arg Gly Gly Ala Ala Glu Ala Arg Leu Thr Val Asn Ala Pro Pro Val
385                 390                 395                 400
Val Thr Ala Leu His Ser Ala Pro Ala Phe Leu Arg Gly Pro Ala Arg
```

```
                 405                      410                      415
Leu Gln Cys Leu Val Phe Ala Ser Pro Ala Pro Asp Ala Val Val Trp
            420                  425                  430
Ser Trp Asp Glu Gly Phe Leu Glu Ala Gly Ser Gln Gly Arg Phe Leu
            435                  440                  445
Val Glu Thr Phe Pro Ala Pro Glu Ser Arg Gly Gly Leu Gly Pro Gly
    450                  455                  460
Leu Ile Ser Val Leu His Ile Ser Gly Thr Gln Glu Ser Asp Phe Ser
465                  470                  475                  480
Arg Ser Phe Asn Cys Ser Ala Arg Asn Arg Leu Gly Glu Gly Gly Ala
            485                  490                  495
Gln Ala Ser Leu Gly Arg Arg Asp Leu Leu Pro Thr Val Arg Ile Val
            500                  505                  510
Ala Gly Val Ala Ala Ala Thr Thr Thr Leu Leu Met Val Ile Thr Gly
            515                  520                  525
Val Ala Leu Cys Cys Trp Arg His Ser Lys Ala Ser Ala Ser Phe Ser
    530                  535                  540
Glu Gln Lys Asn Leu Met Arg Ile Pro Gly Ser Ser Asp Gly Ser Ser
545                  550                  555                  560
Ser Arg Gly Pro Glu Glu Glu Thr Gly Ser Arg Glu Asp Arg Gly
            565                  570                  575
Pro Ile Val His Thr Asp His Ser Asp Leu Val Leu Glu Glu Lys Gly
            580                  585                  590
Thr Leu Glu Thr Lys Asp Pro Thr Asn Gly Tyr Tyr Lys Val Arg Gly
            595                  600                  605
Val Ser Val Ser Leu Ser Leu Gly Glu Ala Pro Gly Gly Gly Leu Phe
    610                  615                  620
Leu Pro Pro Pro Ser Pro Leu Gly Pro Pro Gly Thr Pro Thr Phe Tyr
625                  630                  635                  640
Asp Phe Asn Pro His Leu Gly Met Val Pro Pro Cys Arg Leu Tyr Arg
            645                  650                  655
Ala Arg Ala Gly Tyr Leu Thr Thr Pro His Pro Arg Ala Phe Thr Ser
            660                  665                  670
Tyr Ile Lys Pro Thr Ser Phe Gly Pro Pro Asp Leu Ala Pro Gly Thr
            675                  680                  685
Pro Pro Phe Pro Tyr Ala Ala Phe Pro Thr Pro Ser His Pro Arg Leu
    690                  695                  700
Gln Thr His Val
705


<210> 7
<211> 2976
<212> DNA
<213> Homo sapiens

<400> 7
gggaactggc aggcgtttca gagcgtcaga ggctgcggat gagcagactt ggaggactcc 60
aggccagaga ctaggctggg cgaagagtcg agcgtgaagg gggctccggg ccagggtgac 120
aggaggcgtg cttgagagga agaagttgac gggaaggcca gtgcgacggc aaatctcgtg 180
aaccttgggg gacgaatgct caggatgcgg gtccccgccc tcctcgtcct cctcttctgc 240
ttcagaggga gagcaggccc gtcgccccat ttcctgcaac agccagagga cctggtggtg 300
ctgctggggg aggaagcccg gctgccgtgt gctctgggcg cctactgggg gctagttcag 360
tggactaaga gtgggctggc cctagggggc caaagggacc taccagggtg gtcccggtac 420
tggatatcag ggaatgcagc caatggccag catgacctcc acattaggcc cgtggagcta 480
gaggatgaag catcatatga atgtcaggct acacaagcag gcctccgctc cagaccagcc 540
caactgcacg tgctggtccc cccagaagcc ccccaggtgc tgggcggccc ctctgtgtct 600
ctggttgctg agttcctgc gaacctgaca tgtcggagcc gtggggatgc ccgccctgcc 660
cctgaattgc tgtggttccg agatggggtc ctgttggatg agccacctt ccatcagacc 720
ctgctgaagg aagggacccc tgggtcagtg gagagcacct taaccctgac ccccttttcag 780
ccatgatgat ggagccacct ttgtctgccg ggcccggagc caggccctgc ccacaggaag 840
```

8

```
agacacagct atcacactga gcctgcagta ccccccagag gtgactctgt ctgcttcgcc 900
acacactgtg caggagggag agaaggtcat tttcctgtgc caggccacag cccagcctcc 960
tgtcacaggc tacaggtggg caaaagggggg ctctccggtg ctcggggccc gcgggccaag 1020
gttagaggtc gtggcagacg cctcgttcct gactgagccc gtgtcctgcg aggtcagcaa 1080
cgccgtgggt agcgccaacc gcagtactgc gctggatgtg ctgtttgggc cgattctgca 1140
ggcaaagccg gagccgtgt ccgtggacgt gggggaagac gcttccttca gctgcgcctg 1200
gcgcgggaac ccgcttccac gggtaacctg acccgccgc ggtggcgcgc aggtgctggg 1260
ctctggagcc acactgcgtc ttccgtcggt ggggcccgag gacgcaggcg actatgtgtg 1320
cagagctgag gctgggctat cgggcctgcg gggcggcgcc gcggaggctc ggctgactgt 1380
gaacgctccc ccagtagtga ccgccctgca ctctgcgcct gccttcctga ggggccctgc 1440
tcgcctccag tgtctggttt tcgcctctcc cgccccagat gccgtggtct ggtcttggga 1500
tgagggcttc ctggaggcgg ggtcgcaggg ccggttcctg gtggagacat tccctgcccc 1560
agagagccgc gggggactgg gtccgggcct gatctctgtg ctacacattt cggggaccca 1620
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cagcgacggc tccagttcac gaggtcctga agaagaggag acaggcagcc gcgaggaccg 1920
gggcccccat gtgcacactg accacagtga tctggttctg gaggaggaag ggactctgga 1980
gaccaaggac ccaaccaacg gttactacaa ggtccgagga gtcagtgtga gcctgagcct 2040
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gttggcgacc ttactcctcc aaaactgaac acaaggggag ggaaagatca ttacatttgt 2460
caggagcatt tgtatacagt cagctcagcc aaaggagatg ccccaagtgg gagcaacatg 2520
gccacccaat atgcccacct attccccggt gtaaaagaga ttcaagatgg caggtaggcc 2580
ctttgaggag agatggggac agggcagtgg gtgttgggag tttggggccg ggatggaagt 2640
tgtttctagc cactgaaaga agatatttca agatgaccat ctgcattgag aggaaaggta 2700
gcataggata gatgaagatg aagagcatac caggccccac cctggctctc cctgagggga 2760
actttgctcg gccaatggaa atgcagccaa gatggccata tactccctag gaacccaaga 2820
tggccaccat cttgatttta ctttccttaa agacacagaa agacttggac ccaaggagtg 2880
gggatacagt gagaattacc actgttgggg caaaatattg ggataaaaat atttatgttt 2940
aataataaaa aaaagtcaaa aaaaaaaaaa aaaaaa 2976
```

<210> 8
<211> 196
<212> PRT
<213> Homo sapiens

<400> 8

```
Met Leu Arg Met Arg Val Pro Ala Leu Leu Val Leu Leu Phe Cys Phe
1               5                   10                  15
Arg Gly Arg Ala Gly Pro Ser Pro His Phe Leu Gln Gln Pro Glu Asp
            20                  25                  30
Leu Val Val Leu Leu Gly Glu Glu Ala Arg Leu Pro Cys Ala Leu Gly
        35                  40                  45
Ala Tyr Trp Gly Leu Val Gln Trp Thr Lys Ser Gly Leu Ala Leu Gly
    50                  55                  60
Gly Gln Arg Asp Leu Pro Gly Trp Ser Arg Tyr Trp Ile Ser Gly Asn
65                  70                  75                  80
Ala Ala Asn Gly Gln His Asp Leu His Ile Arg Pro Val Glu Leu Glu
            85                  90                  95
Asp Glu Ala Ser Tyr Glu Cys Gln Ala Thr Gln Ala Gly Leu Arg Ser
            100                 105                 110
Arg Pro Ala Gln Leu His Val Leu Val Pro Pro Glu Ala Pro Gln Val
        115                 120                 125
Leu Gly Gly Pro Ser Val Ser Leu Val Ala Gly Val Pro Ala Asn Leu
    130                 135                 140
```

```
Thr Cys Arg Ser Arg Gly Asp Ala Arg Pro Ala Pro Glu Leu Leu Trp
145             150             155             160
Phe Arg Asp Gly Val Leu Leu Asp Gly Ala Thr Phe His Gln Thr Leu
                165             170             175
Leu Lys Glu Gly Thr Pro Gly Ser Val Glu Ser Thr Leu Thr Leu Thr
                180             185             190
Pro Phe Gln Pro
                195
```

```
<210> 9
<211> 1532
<212> DNA
<213> Homo sapiens

<400> 9
cccagagacc caggccgcgg aactggcagg cgtttcagag cgtcagaggc tgcggatgag 60
cagacttgga ggactccagg ccagagacta ggctgggcga agagtcgagc gtgaagggggg 120
ctccgggcca gggtgacagg aggcgtgctt gagaggaaga agttgacggg aaggccagtg 180
cgacggcaaa tctcgtgaac cttgggggac gaatgctcag gatgcgggtc cccgccctcc 240
tcgtcctcct cttctgcttc agagggagag caggcccgtc gccccatttc ctgcaacagc 300
cagaggacct ggtggtgctg ctgggcgagg gaggtgccca ggccagcctg ggccgtagag 360
cctcagcctc tttctccgag caaaagaacc tgatgcgaat ccctggcagc agcgacggct 420
ccagttcacg aggtcctgaa gaagaggaga caggcagccg cgaggaccgg ggccccattg 480
tgcacactga ccacagtgat ctggttctgg aggaggaagg gactctggag accaaggacc 540
caaccaacgg ttactacaag gtccgaggag tcagtgtgag cctgagcctt ggcgaagccc 600
ctggaggagg tctcttcctg ccaccaccct cccccccttgg gccccaggg acccctacct 660
tctatgactt caacccacac ctgggcatgg tcccccctg cagactttac agagccaggg 720
caggctctct caccacaccc caccctcgag ctttcaccag ctacatcaaa cccacatcct 780
ttgggccccc agatctggcc cccgggactc ccccttccc atatgctgcc ttccccacac 840
ctagccaccc gcgtctccag actcacgtgt gacatctttc caatggaaga gtcctgggat 900
ctccaacttg ccataatgga ttgttctgat ttctgaggag ccaggacaag ttggcgacct 960
tactcctcca aaactgaaca caaggggagg gaaagatcat tacatttgtc aggagcattt 1020
gtatacagtc agctcagcca aaggagatgc cccagtgggg agcaacatgg ccacccaata 1080
tgcccaccta ttccccggtg taaaagagat tcaagatggc aggtaggccc tttgaggaga 1140
gatggggaca gggcagtggg tgttgggagt ttggggccgg gatggaagtt gtttctagcc 1200
actgaaagaa gatatttcaa gatgaccatc tgcattgaga ggaaaggtag cataggatag 1260
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ccaatggaaa tgcagccaag atggccatat actccctagg aacccaagat ggccaccatc 1380
ttgattttac tttccttaaa gactcagaaa gacttggacc caaggagtgg ggatacagtg 1440
agaattacca ctgttggggc aaaatattgg gataaaaata tttatgttta ataataaaaa 1500
aaagtcaaag aggcaaaaaa aaaaaaaaaa aa 1532
```

```
<210> 10
<211> 219
<212> PRT
<213> Homo sapiens

<400> 10
Met Leu Arg Met Arg Val Pro Ala Leu Leu Val Leu Leu Phe Cys Phe
1               5               10              15
Arg Gly Arg Ala Gly Pro Ser Pro His Phe Leu Gln Gln Pro Glu Asp
                20              25              30
Leu Val Val Leu Leu Gly Glu Gly Gly Ala Gln Ala Ser Leu Gly Arg
                35              40              45
Arg Ala Ser Ala Ser Phe Ser Glu Gln Lys Asn Leu Met Arg Ile Pro
    50              55              60
Gly Ser Ser Asp Gly Ser Ser Ser Arg Gly Pro Glu Glu Glu Glu Thr
65              70              75              80
Gly Ser Arg Glu Asp Arg Gly Pro Ile Val His Thr Asp His Ser Asp
                85              90              95
```

```
Leu Val Leu Glu Glu Glu Gly Thr Leu Glu Thr Lys Asp Pro Thr Asn
            100                 105                 110
Gly Tyr Tyr Lys Val Arg Gly Val Ser Val Ser Leu Ser Leu Gly Glu
            115                 120                 125
Ala Pro Gly Gly Gly Leu Phe Leu Pro Pro Pro Ser Pro Leu Gly Pro
        130                 135                 140
Pro Gly Thr Pro Thr Phe Tyr Asp Phe Asn Pro His Leu Gly Met Val
145                 150                 155                 160
Pro Pro Cys Arg Leu Tyr Arg Ala Arg Ala Gly Tyr Leu Thr Thr Pro
                165                 170                 175
His Pro Arg Ala Phe Thr Ser Tyr Ile Lys Pro Thr Ser Phe Gly Pro
            180                 185                 190
Pro Asp Leu Ala Pro Gly Thr Pro Pro Phe Pro Tyr Ala Ala Phe Pro
        195                 200                 205
Thr Pro Ser His Pro Arg Leu Gln Thr His Val
    210                 215
```

<210> 11
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Adapter for cDNA amplification

<400> 11
cagctccaca acctacatca ttccgt   26

<210> 12
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Adapter for cDNA amplification

<400> 12

acggaatgat gt   12

<210> 13
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Adapter for cDNA amplification

<400> 13
gtccatcttc tctctgagac tctggt   26

<210> 14
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Adapter for cDNA amplification

<400> 14

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accagagtct ca                                                    12

<210> 15
<211> 26
<212> DNA
<213> Artificial Sequence


<220>
<223> Adapter for cDNA amplification

<400> 15
ctgatgggtg tcttctgtga gtgtgt                                     26

<210> 16
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Adapter for cDNA amplification

<400> 16
acacactcac ag                                                    12

<210> 17
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Adapter for cDNA amplification

<400> 17
ccagcatcga gaatcagtgt gacagt                                     26

<210> 18
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Adapter for cDNA amplification

<400> 18
actgtcacac tg                                                    12

<210> 19
<211> 26
<212> DNA
<213> Artificial Sequence

<220>

<223> Adapter for cDNA amplification

<400> 19
gtcgatgaac ttcgactgtc gatcgt                                     26

<210> 20
<211> 12
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<212> DNA
<213> Artificial Sequence

<220>
<223> Adapter for cDNA amplification

<400> 20
acgatcgaca gt   12

<210> 21
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for RACE method

<400> 21
ggctttacac tttatgcttc cggctc   26

<210> 22
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for RACE method

<400> 22
cagctatgac catgattacg ccaagc   26

<210> 23
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for RACE method

<400> 23
aggcgattaa gttgggtaac gccagg   26

<210> 24
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for RACE method

<400> 24
ccagtcacga cgttgtaaaa cgacgg   26

<210> 25
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for RACE method

```
<400> 25
cttcccgtat gctaccttgt ctccac                                      26


<210> 26
<211> 26
<212> DNA
<213> Artificial Sequence


<220>
<223> Primer for RACE method

<400> 26
tccatctctc caagtgaagg gtcttg                                      26


<210> 27
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for RACE method

<400> 27
ccaacagtcc tgcatgcttg taatga                                      26


<210> 28
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for RACE method

<400> 28
tccttcaatg ttcagttttg gagggg                                      26
```